

## CLAIMS

1. A fluoropolymer aqueous dispersion which comprises a particle comprising a fluoropolymer  
5 dispersed in an aqueous medium in the presence of a nonionic surfactant,

wherein a supernatant for assaying as obtained by subjecting said fluoropolymer aqueous dispersion to 30 minutes of centrifugation at 25°C and at a gravitational  
10 acceleration of 1677G, when subjected to high-performance liquid chromatography [HPLC] under the conditions of a flow rate of 1.0 ml/minute and a column temperature of 40°C using an acetonitrile/0.05 M aqueous solution of phosphoric acid (60/40% by volume)  
15 mixture as a developing solution, followed by detection at an absorption wavelength at which said nonionic surfactant can be identified, shows a ratio ( $A^1/A^0$ ), which is the ratio between the total area ( $A^0$ ) under the detected line and the area ( $A^1$ ) under the detected line  
20 over a retention time period shorter than 16 minutes, of not lower than 0.4 and

said supernatant for assaying has a fluorine-containing anionic surfactant content of not higher than 100 ppm.

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2. The fluoropolymer aqueous dispersion according to Claim 1,

wherein the nonionic surfactant amounts to 5 to 15% by mass relative to the fluoropolymer solid matter  
30 in said fluoropolymer aqueous dispersion.

3. The fluoropolymer aqueous dispersion according to Claim 1 or 2,

wherein an electrolyte concentration is 0.05  $\mu$ S/cm  
35 to 10 mS/cm.

4. The fluoropolymer aqueous dispersion according to Claim 1, 2 or 3,

wherein the fluorine-containing anionic  
5 surfactant content in the supernatant for assaying is not higher than 50 ppm.

5. The fluoropolymer aqueous dispersion according to Claim 1, 2 or 3,

10 wherein the fluorine-containing anionic surfactant content in the supernatant for assaying is not higher than 25 ppm.

6. The fluoropolymer aqueous dispersion according to Claim 1, 2, 3, 4 or 5,

wherein the fluoropolymer is a tetrafluoroethylene polymer.

7. The fluoropolymer aqueous dispersion according to Claim 1, 2, 3, 4, 5 or 6,

wherein the fluoropolymer is a perfluoropolymer.

8. The fluoropolymer aqueous dispersion according to Claim 1, 2, 3, 4, 5, 6 or 7,

25 wherein the fluoropolymer solid matter content is 20 to 80% by mass relative to said fluoropolymer aqueous dispersion.

9. A method of producing the fluoropolymer aqueous dispersion according to Claim 1, 2, 3, 4, 5, 6, 7 or 8 which comprises adding a nonionic surfactant (B) to a pretreatment fluoropolymer aqueous dispersion containing a nonionic surfactant (A),

wherein the supernatant for assaying as obtained  
35 by subjecting said pretreatment fluoropolymer aqueous

dispersion to 30 minutes of centrifugation at 25°C and at a gravitational acceleration of 1677G has a fluorine-containing anionic surfactant content of not higher than 100 ppm,

5       said nonionic surfactant (A) has an HLB of 12 to 14 and

      said nonionic surfactant (B) has an HLB of 13 to 15.

10       10. The method of producing the fluoropolymer aqueous dispersion according to Claim 9,

      wherein an electrolyte is further added to the pretreatment fluoropolymer aqueous dispersion.

15       11. The method of producing the fluoropolymer aqueous dispersion according to Claim 9 or 10,

      wherein the pretreatment fluoropolymer aqueous dispersion is obtained by carrying out a concentration operation at least twice.

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      12. The method of producing the fluoropolymer aqueous dispersion according to Claim 9, 10 or 11,

      wherein the fluorine-containing anionic surfactant is the one to be present in carrying out a polymerization in the aqueous medium for obtaining the fluoropolymer and/or the one added after carrying out a concentration operation following the polymerization.

30       13. A fluoropolymer powder which is obtained by drying a wet powder obtained from the fluoropolymer aqueous dispersion according to Claim 1, 2, 3, 4, 5, 6, 7 or 8.

35       14. A fluoropolymer molding which is obtained by

molding/processing the fluoropolymer aqueous dispersion according to Claim 1, 2, 3, 4, 5, 6, 7 or 8 or the fluoropolymer powder according to Claim 13.